Journal of Forensic and Legal Medicine 16 (2009) 298

Contents lists available at ScienceDirect

Journal of Forensic and Legal Medicine

journal homepage: www.elsevier.com/jflm

Letter to the Editor

Lethal spontaneous aortic dissection in an adolescent

We read with interest the paper by Lynch et al.[1] regarding sudden death in a 17 year-old male due to aortic rupture of an undiagnosed coarctation. We recently saw a similar outcome in a 15-year-old African–American male with no history of recreational-drug use, trauma or known connective tissue disease, and with one-year history of insulin-dependent diabetes, who developed abdominal pain and bilateral lower extremity weakness. Initial vital signs were stable with diminishing femoral pulses and lower extremity anesthesia. The abdomen was diffusely tender with reduced bowel sounds. Hypertension developed (200/120 mm Hg) and was controlled with an esmolol bolus. Aortic dissection and aortic insufficiency were seen on transesophageal echosonogram. He rapidly became hypotensive and bradycardic, and eventually asystolic 16 h after onset of symptoms. Autopsy revealed Type B aortic dissection with a 2-cm linear intimal tear distal to the left subclavian artery (Gross image), and extensive intra-abdominal and retroperitoneal hemorrhage (see Fig. 1).

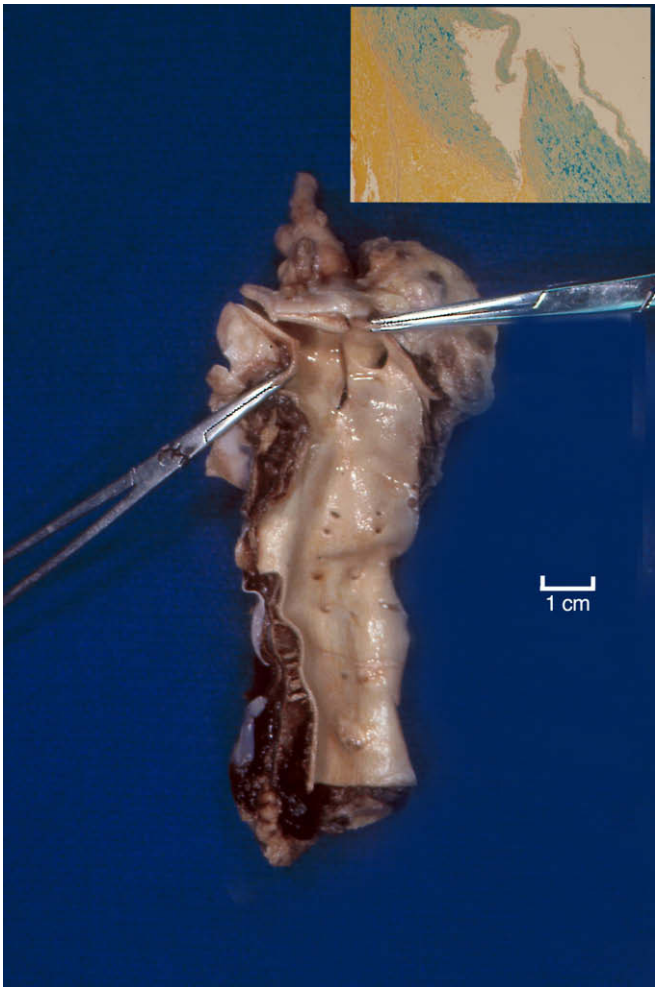

Fig. 1. Arch of the aorta showing intimal tear in a gross photograph, and cystic medial degeneration stained with colloidal iron on a microscopic section in the inset.

A connective tissue disorder was implicated in our case as demonstrated by a colloidal iron stain showing cystic medial degeneration surrounding the intimal tear (Microscopic image in inset). As indicated by Lynch et al. our case illustrates the most common mechanism for rare lethal aortic pathology in young patients.

Conflict of interest statement

No conflict of interest.

Reference

1. Lynch MJ, Woodford NW, Dodd MJ. Sudden death due to aortic rupture complicating undiagnosed coarctation of the aorta in a teenager – a case report and review of the literature. *J Forensic Leg Med* 2008;**15**:443–6.

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Available online 25 January 2009

doi:10.1016/j.jflm.2008.12.025